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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 824,966	04 03 2001	Apostol Konomi	99-070-JK	1885
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LAMBERT & ASSOCIATES, P.L.L.C. 92 STATE STREET BOSTON, MA 02109-2004			EXAMINER	
			PAYNE, SHARON E	
		ART UNIT	PAPER NUMBER	
			2875	

DATE MAILED: 08/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.

09/824 966

Applicant(s)

KIRK DM - ART UNIT

Examiner

Sharon E. Payne

Art Unit

2875

Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION

- Extensions of time may be available under the provisions of 37 CFR 1.13(b)(1). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will by statute cause the application to become ABANDONED.
- Any reply received by the Office later than three months after the mailing date of this communication will not be given an earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____
- 2a) This action is **FINAL**. 2b) This action is non-final
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-19 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement

Application Papers

- 9) The specification is objected to by the Examiner
- 10) The drawing(s) filed on 03 April 2001 is/are: a) accepted or b) objected to by the Examiner

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner

If approved, corrected drawings are required in reply to this Office action
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 - 1) Certified copies of the priority documents have been received
 - 2) Certified copies of the priority documents have been received in Application No. _____
 - 3) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a))

* See the attached detailed Office action for a list of the certified copies not received
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
 - a) The translation of the foreign language provisional application has been received
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-1449) Paper No(s) _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because Fig. 7 indicates the size of an angle using a comma in place of a period ("1,73" should be "1.73"). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the two sheets of plastic material with a width of 2mm each (claim 3) and the electrical circuitry (claim 17) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities

- 1) on page 17, line 5, the symbols in the formula should be defined; and
- 2) on page 18, line 5, "1.73" should be "1.73."

Appropriate correction is required.

Claim Objections

4. Claim 2 is objected to because of the following informalities: 1) the phrase "37mm-65mm" in line 2 should have spacing between the quantity and the unit and should be written as

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"37 mm to 65 mm"; and 2) the phrase "1.5-2.5inches" in line 3 should have spacing between the quantity and the unit and should be written as "1.5-2.5 inches."

5. Claim 8 is objected to because of the following informality: the word "lamps" in line 2 should be "light sources."

6. Claim 9 is objected to because of the following informality: the phrase "first display panel" in line 4 should be "first display signage panel."

7. Claim 13 is objected to because of the following informality: the phrase "panels have" in line 2 should be "panel has."

8. Claim 18 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form or rewrite the claim(s) in independent form. Claim 1 already claims two light sources. The use of the word "comprising" in claim 18 means that more light sources may be present

9. Claim 19 is objected to because of the following informality: the word "comprised" should be "comprises".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

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11. Claims 1, 4-7, 9-14 and 16-19 are rejected under 35 U S C 102(b) as being anticipated by Ashall (U.S. Patent 5,625,968).

Regarding claim 1, Ashall discloses a display system. The display system includes two display signage panels having a desired design face (Fig. 1, column 3, lines 31-33); at least two light sources (reference number 21) offset from and behind the two display signage panel (Fig. 1, column 2 in lines 16-17); and a light directing panel located behind at least one of the two display signage panels (abstract).

Concerning claim 4, Ashall discloses a light directing panel (transparent sheet reference number 10) comprising two sides (Fig. 1).

Regarding claim 5, Ashall discloses a light directing panel (transparent sheet, reference number 10) comprising four sides (Fig. 1). (The edges are sides.)

Concerning claim 6, Ashall discloses a light directing panel (reference number 10) wherein at least a portion of the light-directing panel is substantially transparent for allowing light incident thereon to pass through the light-directing panel and toward said display signage panel (column 2, lines 6-14).

Regarding claim 7, Ashall discloses a light-directing panel that is completely non-transparent (column 2, lines 43-49).

Concerning claim 9, Ashall discloses two display signage panels having a desired design face, a first display signage panel and a second display signage panel (column 2, lines 43-45); wherein the two light sources are offset from and located substantially equidistantly from the first display panel and the second display signage panel. (column 2, lines 16-17 and Fig. 1), and the light directing panel (reference number 10) being located substantially equidistantly between the two display signage panels (reference number 17, Fig. 2b) whereby light directly incident on each display signage panel from the two light sources and redirected light from the

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light-directing panel backlight and illuminate the first display signage panel and the second display signage panel (abstract, column 2 in lines 43-45).

Regarding claim 10, Ashall discloses the two display signage panels having the same height and length (Figs. 1 and 2b).

Concerning claim 11, Ashall discloses the two display signage panels being substantially as tall as the glass portion of the two light sources (Fig. 1, column 2 in lines 16-17, column 2 in lines 43-49). The glass portion of the light source in Fig. 1 is shown as being the same width as the display signage panel, and the specification indicates that a light may be used on the another side, which may be a vertical side (column 2, lines 16-17). To implement this invention the glass portion of any lights on the vertical side would have to be the same length as the vertical side.

Regarding claim 12, Ashall discloses the light directing panel (reference number 10) being substantially the same height as the two display signage panels (Figs. 1 and 2b)

Concerning claim 13, Ashall discloses the light-directing panel having substantially the same height as the glass portion of the two light sources (Fig. 1, column 2 in lines 16-17, column 2 in lines 43-49). The glass portion of the light source in Fig. 1 is shown as being the same width as the light-directing panel, and the specification indicates that a light may be used on the another side, which may be a vertical side (column 2, lines 16-17). To implement this invention the glass portion of any lights on the vertical side would have to be the same length as the vertical side.

Regarding claim 14, Ashall discloses a housing (carrier, reference number 20) for supporting two display signage panels or at least one display signage panel (Fig. 1 column 2 in lines 43-45).

Concerning claim 16. Ashall discloses a housing (reference number 20) constructed of a rigid material (Fig. 1). The housing has to be rigid to support the sign.

Regarding claim 17, Ashall inherently discloses electrical circuitry associated with powering the double-sided edge lighting-type display sign, wherein the electrical circuitry is configured not to interfere with the backlight and illumination of the two display signage panels. These features are considered to be inherent, because the electrical circuitry and the claimed configuration are necessary to make the invention in Ashall work.

Concerning claim 18, Ashall discloses two light sources (column 2, lines 16-17).

Regarding claim 19, Ashall discloses the light sources comprising elongated fluorescent bulbs (column 2 in lines 50-55, Fig. 1).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ashall.

Regarding claim 2. Ashall does not disclose a lighting-type display box wherein the overall thickness of the double-sided edge lighting-type display box is 37 mm-65 mm or 1 5-2 5 inches.

Determining the thickness of a lighting display is considered to be an obvious variation in design. Since the light display box is well known in the art, it would have been obvious to one

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skilled in the art to determine an overall thickness in the Ashall reference for distributing the light as desired.

Concerning claim 3, Ashall discloses the use of plastic sheets (column 2, lines 48-49) and signage panels constructed of two sheets (reference numbers 16 and 17, Fig. 2b)

Using two plastic sheets with a width of 2 mm each is considered to be an obvious variation in design. Since using plastic for signage is well known in the art as is using two sheets, it would have been obvious for one skilled in the art to use two plastic sheets with a width of 2 mm for holding the signage in the Ashall reference.

14. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ashall in view of Murase et al. (U.S. Patent 5,283,673).

Regarding claim 8, Ashall does not disclose the distance between two light sources being less than 65% of the length of the two light sources. Murase et al. discloses the distance between two light sources (reference number 14) being less than 65% of the length of the two light sources (Fig. 6) to illuminate the display.

It would have been obvious to one of ordinary skill in the art to make the light sources in Ashall have the same distance between each other as those in Murase et al. for to illuminate the display sufficiently.

15. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ashall in view of Kashima et al. (U.S. Patent 5,618,095).

Regarding claim 15, Ashall does not disclose the interior of the housing having a partially reflective surface. Kashima et al. discloses the interior of the housing having an at least partially reflecting surface (reference number 7) for the purpose of directing light toward the display signage panels or at least one display signage panel

It would have been obvious to one of ordinary skill in the art to use the reflector of Kashima in the apparatus of Ashall for directing light towards the signs.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Plumly (U.S. Patent 4,385,343) discloses edge lighted devices.

Dimmick (U.S. Patent 5,151,679) discloses a display sign.

Oberacker (U.S. Patent 2,095,558) discloses an illuminated sign.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon E. Payne whose telephone number is (703) 308-2125. The examiner can normally be reached on regular business hours

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

sep
August 9, 2002

